agreements among these competitors. These horizontal practices were designed to, and in fact did, have a substantial and adverse impact in the United States.

30. The acts charged in this Complaint as having been performed by Defendants and their co-conspirators, including trading companies in China, were authorized, ordered, or done by their respective officers, agents, employees, or representatives, while actively engaged in the management of each Defendants' business or affairs. The acts charged in the Complaint continue to the present day.

## IV. CLASS ACTION ALLEGATIONS

- 31. Plaintiff Animal Science brings this action on its own behalf, and under Rule 23(b)(2) and (3) of the Federal Rules of Civil Procedure, as representative of a class defined as: all persons or entities who have purchased magnesite or magnesite products manufactured by any Defendant for delivery in the United States requiring injunctive relief against Defendants to end Defendants' antitrust violations (the "injunctive relief" class).
- 32. Plaintiff Resco Products brings this action on its own behalf, and under Rule 23(b)(3) of the Federal Rules of Civil Procedure, as representative of a class defined as: all persons or entities who have directly purchased magnesite or magnesite products for delivery in the United States from any of Defendants or their co-conspirators from September 2001 to the date that the cartel is ended by an injunction or otherwise (the "damages" class).
- 33. Excluded from both classes are all governmental entities, Defendants, their coconspirators, Chinese trading companies, and their respective subsidiaries and affiliates.
  - 34. Members of the classes are numerous and joinder is impracticable.
- 35. Plaintiffs' claims are typical of the members of the classes. Plaintiffs and all members of the plaintiff classes were damaged by the same wrongful conduct by Defendants.

- 36. Plaintiffs will fairly and adequately protect and represent the interests of the plaintiff classes. The interests of Plaintiffs are coincident with, and not antagonistic to, those of the classes.
- 37. Plaintiffs are represented by counsel who are experienced and competent in the prosecution of complex class action and antitrust litigation.
- 38. Questions of law and fact common to the members of the classes predominate over questions, if any, that may affect only individual members because Defendants have acted on grounds generally applicable to the classes. Such generally applicable conduct is inherent in Defendants' collusion.
  - 39. Questions of law and fact common to the classes include:
    - whether Defendants combined, agreed, and conspired among themselves to restrain competition for and specifically to fix, maintain, or stabilize export prices of magnesite and magnesite products in the United States;
    - the existence and duration of the horizontal agreements to restrain competition alleged in this Complaint;
    - (c) whether each Defendant was a member of, or participant in, any combination and/or conspiracy alleged in this Complaint;
    - (d) whether and to what extent Defendants' conduct caused injury to business or property of Plaintiffs and the damages class, and, if so, the appropriate measure of damages;
    - (e) whether the agents, officers or employees of Defendants and their coconspirators participated in telephone calls and meetings in furtherance of the conspiracy alleged herein; and
    - (f) whether Plaintiffs and members of the plaintiff classes are entitled to declaratory and/or injunctive relief.

40. Class action treatment is the superior (if not the only) method for the fair and efficient adjudication of this controversy, in that, among other things, such treatment will permit a large number of similarly situated persons to prosecute their common claims in a single forum simultaneously, efficiently, and without the unnecessary duplication of evidence, effort, and expense that numerous individual actions would engender. The benefits of proceeding through the class mechanism, including providing injured persons or entities with a method for obtaining redress on claims that it might not be practicable to pursue individually, substantially outweigh the difficulties, if any, that may arise in management of this class action.

## V. TRADE AND COMMERCE

- 41. Magnesium is the eighth most abundant element on earth and constitutes about two percent of the earth's crust. Magnesite is the naturally occurring carbonate form of magnesium and represents the largest use of magnesium in the world.
- 42. Magnesite is mined from magnesium deposits and delivered from the mine to a crushing plant where it is crushed in three stages. Depending on the grade of the crushed material, the crushed magnesite is used in different production facilities to produce different forms of magnesite.
- 43. There are three principal forms of magnesite sold in U.S. commerce. Dead-burned magnesite ("DBM") is produced by high temperature conversion of magnesite. DBM is used for the lining of metallurgical or refractory furnaces used for the melting of steel, nonferrous metal and glass and the making of cement. Approximately 70 percent of the world's production of magnesite is attributable to DBM.
- 44. Caustic-calcined magnesite ("CCM") is produced by low temperature conversion.

  CCM is used in many market segments, including environmental applications. For example, CCM is used to remove silica and heavy metals from industrial wastewater, to remove sulphur dioxide

from industrial gases. Approximately 36 percent of U.S. magnesite consumption from 2000 to 2006 was in the form of CCM.<sup>3</sup>

- 45. A third type of magnesite electro-fused magnesite ("EFM") or fused magnesite is produced by fusing CCM at high temperatures in an electric arc furnace. EFM is divided into two segments: refractory and electrical. Refractory EFM is used in similar fashion to DBM and is sometimes used in combination with DBM. Electrical EFM is used in insulating material in heating elements for electrical goods. China accounts for 80 percent of worldwide EFM production. Approximately 8 percent of the world's production of magnesite is in the form of EFM.
- 46. China is a leading producer of magnesite. According to statistics published by the United States Geological Survey ("USGS"), China's share of annual world production has increased from 32 percent in 2001 to 45 percent in 2007.<sup>4</sup>
- 47. During the period described in this Complaint, the international market for magnesite and magnesite products was dominated by Defendants and their co-conspirators, including producers of magnesite and magnesite products and trading companies in China exporting magnesite and magnesite products. China is the most significant foreign supplier of magnesite to the United States with an 83 percent share of fused and dead-burned magnesite imports and an 87 percent share of caustic calcined magnesia imports in 2007. 5

<sup>&</sup>lt;sup>3</sup> Schlag, Glauser & Fujita, "Magnesium Oxide and Other Magnesium Chemicals," CHEMICAL ECONOMICS HANDBOOK, p. 22, SRI Consulting, 2007 (hereinafter "CEH") (excerpts attached hereto as Exhibit 2).

<sup>&</sup>lt;sup>4</sup> USGS, Magnesium Compounds, 2002 MINERALS YEARBOOK, p. 48.10 available at http://minerals.usgs.gov/minerals/pubs/commodity/magnesium/magnmyb02.pdf (attached hereto as Exhibit 3; USGS, Magnesium Compounds, 2007 MINERALS YEARBOOK (hereinafter "2007 Yearbook") p. 46.8 available at

http://minerals.usgs.gov/minerals/pubs/commodity/magnesium/magnmyb07.pdf (attached hereto as Exhibit 4).

<sup>&</sup>lt;sup>5</sup> 2007 Yearbook Table 6.

48. During the period relevant to this Complaint, the conduct of Defendants and their coconspirators has taken place in and affected the interstate commerce of the United States. Hundreds
of thousands of metric tons of magnesite are imported into the United States each year from China.

Data from the U.S. International Trade Commission confirms that imports from China into the U.S.
of magnesite exceeded 500,000 metric tons in each year from 2000 to 2006:

United States Magnesite (Magnesia) Imports
Source: U.S. International Trade Commission
(Units in Metric Tons)

Year	Fused and Dead-Burned Magnesia		Caustic Calcined Magnesia		Natural and Other Magnesite		Total	
	China	All Countries	China	All Countries	China	All Countries	China	All Countries
2000	345,016	500,673	88,488	136,241	6,282	33,476	439,786	670,390
2001	244,957	363,060	77,380	129,859	5,098	28,631	327,435	521,550
2002	286,348	394,222	88,737	147,610	8,915	29,180	384,000	571,012
2003	310,051	379,370	92,670	150,026	17,257	35,382	419,978	564,778
2004	340,933	418,013	96,432	157,398	9,259	31,568	446,625	606,979
2005	389,828	477,638	96,342	152,193	7,998	33,282	494,168	663,113
2006	359,777	433,131	127,340	162,785	9,813	34,193	496,930	630,109
Total	2,276,909	2,966,107	667,389	1,036,112	64,622	225,712	3,008,921	4,227,931

- 49. The value of U.S. imports of magnesite and magnesite products from China exceeded \$50 million in 2000 and exceeded \$160 million in 2008.
- 50. The United States consumes about 25 percent of China's magnesite exports. The steel industry in the United States is the primary consumer of magnesite products, with 390 thousand metric tons consumed by steel refractories in the United States during 2006. Cement refractories are the second leading consumer of magnesia in the United States.

<sup>&</sup>lt;sup>6</sup> See United States International Trade Commission Interactive Tariff and Trade Dataweb available at http://dataweb.usitc.gov/ (hereinafter "USITC Dataweb"); USGS, Magnesium Compounds, 2000 MINERALS YEARBOOK, Table 7 available at http://minerals.usgs.gov/minerals/pubs/commodity/magnesium/magnmyb00.pdf (hereinafter "2000 Yearbook") (attached hereto as Exhibit 5).

<sup>&</sup>lt;sup>7</sup> CEH, p. 92. <sup>8</sup> CEH, pp. 27-28.

51. The conduct of Defendants and their co-conspirators has directly, substantially and foreseeably restrained trade and commerce in the United States. Members of the conspiracy, including Defendants Sinosteel Trading, Liaoning Jiayi, Haicheng Houying, Haicheng Huayu, Yongkou Huachen, China Minerals, and Minmetals directly have sold and continue to sell magnesite and magnesite products to U.S. companies and in U.S. commerce at prices artificially increased by the Cartels.

## VI. FACTUAL ALLEGATIONS

## A. Violations of Antitrust Laws

- 52. On April 9, 2000, following the 1999 decline of magnesite prices, 13 producers and exporters of magnesite in China, including mining companies and trading companies, established the Jiayuan Magnesite Export Group ("Jiyuan Magnesite Group") for the export of magnesite. The members of the Jiyuan Magnesite Group agreed to fixed, uniform export prices in order to avoid competitive price cutting. Defendants Xiyang Refractory Material, Yingkou Huachen, Dalian Golden Sun and Liaoning Foreign Trade were among the original 13 members of the Jiyuan Magnesite Group. Each of them signed an agreement with each of the others to ship their products at the price fixed by the Jiyuan Magnesite Group.
- 53. During that same period, a second group was formed, calling itself the "Huaxia Magnesia Products Export Group" ("Huaxia Magnesite Group"). Members of the Huaxia Magnesite

<sup>&</sup>lt;sup>9</sup> USGS 2000 Minerals Yearbook p. 49.3; "China Jiayuan Magnesite Export Group," ENGINEERING AND MINING JOURNAL, Aug. 1, 2000 (attached hereto as Exhibit 6); "Magnesite Export Group Set Up in China's Dalian," ASIA PULSE, Apr. 11, 2000 (attached hereto as Exhibit 7); "Magnesium carbonate producers form export syndicates," Royal Society of Chemistry, CHEMICAL BUSINESS NEWSBASE, Aug. 18, 2000 (attached hereto as Exhibit 8).